Chapter 4
Unit Symbols

The shadowed boxes *1-16* show the page number for the definition of a symbol.

This chapter establishes a standard system for the development of ground unit symbols. These symbols are for use on situation maps, overlays, and annotated aerial photographs. This chapter applies to both automated and hand-drawn graphic displays or overlays.

This chapter includes a wide variety of unit symbols as well as modifiers for building new or unique symbols. Users should avoid using any symbols, or combinations and modifications of symbols, that differ from those in this manual. If the user, after searching doctrinal symbols and modifers, must create a new symbol, it must be explained in an accompanying legend.

The symbols shown in this chapter are adequate for depicting enemy units. When representing unorthodox units and equipment, select the most appropriate symbol contained herein.

ICON-BASED SYMBOLS

A symbol is composed of three components: a frame (geometric border), fill, and icon. Frames are geometric shapes used to display affiliation. Affiliation refers to whether the warfighting object being represented is a threat. The basic affiliation categories are friendly, unknown, neutral, and enemy. The unknown frame shape is normally used only for aircraft and ships. The frame shape for suspected friendly, enemy, or neutral is used for ground units not positively identified. The basic frame shapes for units, installations, activities, and logistics sites are shown in Figure 4-1, page 4-2.

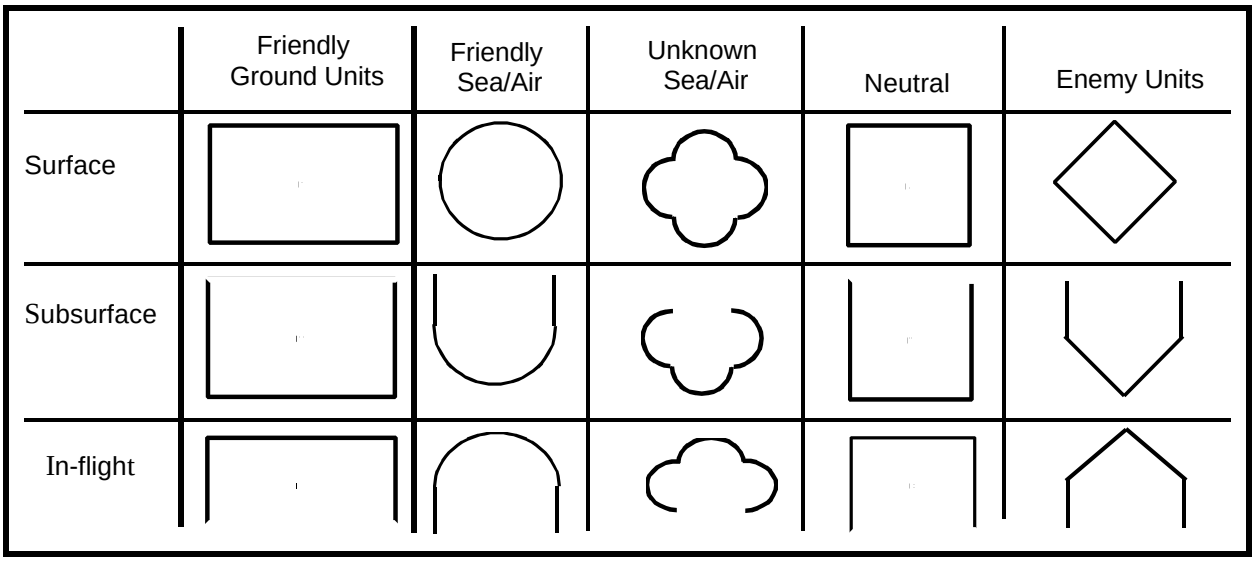


Figure 4-1. Unit, Installation, and Site Symbol Frames

Fill refers to the area within the frame. If color is used in a symbol, it shall indicate affiliation. Generally, black is used for the frame, icon, and modifiers when symbols are displayed on a light background. White is used for these elements when they are displayed on a dark background. A color fill can be used if an icon is displayed within the area of the frame. Figure 4-2, from MILSTD 2525A, shows the color defaults for affiliation used for hand-drawn and computer-generated symbols. The use of any other colors must be explained in an accompanying legend. Automated systems allow users to select other colors and to portray their meaning on the automated overlay display.

Affiliation	Hand-Drawn	Computer-Generated
Friend, Assumed Friend	Blue	Cyan
Unknown, Pending	Yellow	Yellow
Neutral	Green	Green
Enemy, Suspect, Joker, Faker	Red	Red

Figure 4-2. Color Defaults

The icon is a "role indicator" that shows the warfighting function the unit performs either on the ground, in the air, or at sea. An example is the crossed rifles which represent an infantry unit.

This manual does not include an example of every type of unit; however, users can see from those presented the pattern of construction in order to make symbols for new or unique units. Upon US Army and Marine Corps approval, MILSTD 2525A, *Common Warfighting Symbology*, will contain more approved ground unit symbols. Appendix A includes additional examples of friendly units. Appendix B includes examples of enemy units.

BUILDING UNIT SYMBOLS

Seven rules govern the building of unit symbols. They are:
1. Existing standard symbols must be used whenever possible as building blocks for new symbols.
2. Symbols must be usable in manual as well as automated modes.
3. Symbols must be easily distinguishable.
4. Friendly symbols must not use attributes that could be confused with enemy symbols.
5. Symbols must be distinguishable without color. (Monochrome display.)
6. Composite symbols will generally have the primary symbol centered on or below the modifying symbols.
7. All unit symbols will be drawn or portrayed with the top of the symbol facing the top of the overlay (normally North is at the top). Orientation of the symbol will be accomplished by using the “Q” field for moving symbols or another graphic such as a battle position or support by fire position.

Normally, additional information needs to be included with the unit symbol and is placed in standardized unit labeling fields shown in Figure 4-3. The fields are defined in Figure 4-4. The unit location is determined by the center of mass of the symbol or a line (without an arrow head) from the center of the bottom of the frame to the location. Headquarters unit locations are at the bottom of the "headquarters staff," displayed as field "S."

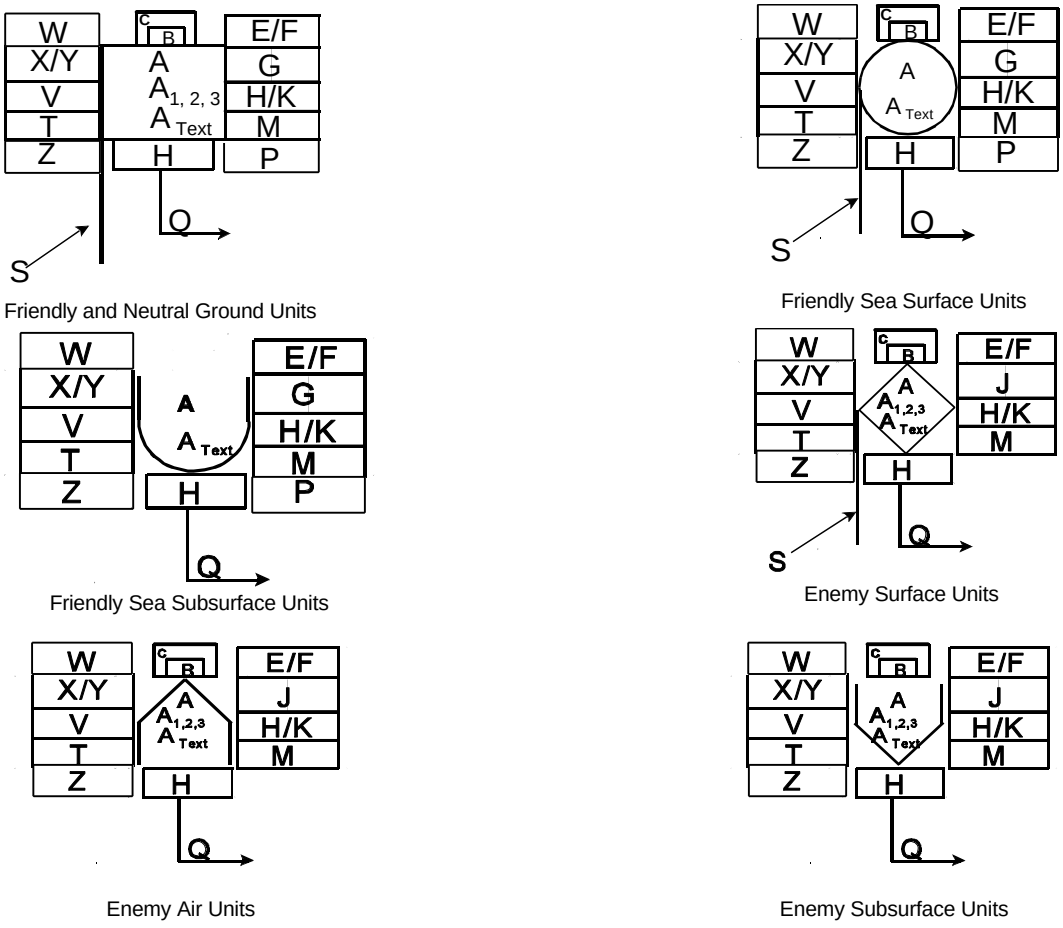
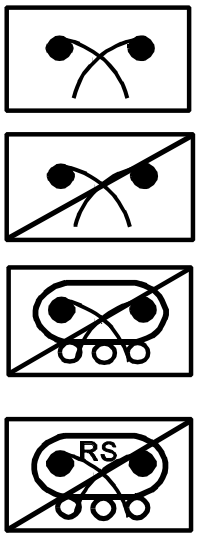


Figure 4-3. Standardized Unit Labeling Fields

Field	Field Title	Description	Application	Length (characters)
A	Symbol	Frame, fill, and icon showing basic function of units, installations, or equipment with modifers A1,A2, and A3.	All	
B	Size Indicator	A symbol that denotes the size of a unit or installation (see Figure 4-5).	Units and installations	
C	Equipment	Indicates number of items present. Installation: Size in square feet.	Units and installations	10
D	Task Force	A symbol placed over the size indicator to denote a task force or company team (see Figure 4-3).	Units	6
E	Suspect, Assumed Friend, Faker, Joker	Question mark '?': suspect, assumed friend, faker. 'J': Joker.	All	1
F	Reinforced or Detached	Shows (+) reinforced , (-) reduced, or (+-) reinforced and reduced.	Units	3
G	Staff Comments	Free text.	All	20
H	Additional Information	Free text.	All	20
J	Evaluation Rating	One letter and one number (see STANAG 2022).	Enemy only	2
K	Combat Effectiveness	Effectiveness of unit displayed.	Units and installations	5
L	Signature Equipment	Indicated by "!" (refers to detectable electronic signatures).	Enemy equipment only	1
M	Higher Formation	Number or title of higher echelon command (corps designated by Roman numerals).	All	21
N	Enemy (Hostile)	Indicated enemy by letters "ENY."	Enemy equipment, lines, areas, and boundaries	3
P	IFF/SIF	Identification modes and codes.	Units and equipment	5
Q	Direction of Movement Arrow	Direction symbol is moving or will move. Nuclear, biological, chemical: Downwind direction.	All	4
R	Mobility Indicator	Pictorial representation of mobility.	Equipment only	
S	Headquarters Staff Indicator/Locating Indicator	Identifies unit symbol as a headquarters or used to indicate location or to declutter.	Units	
T	Unique Designation	An alphanumeric title that uniquely identifies a particular symbol; track number. Nuclear: Friendly delivery unit (missile, satellite, aircraft, etc).	All	21
V	Type of Equipment	Identifies unique designation. Nuclear: Friendly weapons type.	Units and equipment	24
W	Date-Time Group	Alphanumeric field for date/time (MILSTD-2500A) (DDHHMMSSZMONYY) or "o/o" for on order.	All	15
X	Altitude/Depth	Altitude portion of GPS. Flight level for aircraft. Depth for submerged objects. Height in feet of equipment or structure on the ground. Nuclear: Height of burst.	All	6
Y	Location	Latitude and longitude ; grid coordinates.	All	19
Z	Speed	Nautical miles per hour; kilometers per hour.	Units and equipment	5

Figure 4-4. Labeling Field Definitions

As an example, we will build the symbol for a friendly nuclear, biological, or chemical (NBC) reconnaissance unit equipped with the FOX and M21 long-range sensor.



STEP 1. First choose the frame (friendly) and graphic for the basic function or branch of the unit, labeling field "A," In this example, the basic function is NBC.

STEP 2. Choose the graphic modifier for the secondary function or capability, labeling field "$A_{1,}$" (possibly from the list of modifiers). In this example, the secondary function and first modifier is reconnaissance.

STEP 3. Choose the graphic modifier for the next capability, labeling field "$A_{2.}$" In this example, the tertiary (third function or capability) is wheeled armored vehicle.

STEP 4. Choose the graphic modifier for any other capability, labeling field "$A_{3.}$" This example requires no more graphic modifiers.

STEP 5. If necessary to fully distinguish the unit from another type of unit, include a text abbreviation, labeling field "$A_{TEXT,}$" inside the symbol frame. In this example, a text abbreviation "RS" is added inside the symbol to show that this unit is specially equipped with the M21 sensor. Unit size indicators, shown in Figure 4-5, are placed at the top center of the symbol frame in field "B."

Size Indicator	Meaning
▬	Installation
∅	Team/Crew
●	Squad
● ●	Section
● ● ●	Platoon/Detachment
I	Company/Battery/Troop
I I	Battalion/Squadron
I I I	Regiment/Group
X	Brigade
X X	Division
X X X	Corps
X X X X	Army
X X X X X	Army Group/Front
X X X X X X	Region

Figure 4-5. Unit Size and Installation Indicator

Figure 4-6 shows the abbreviations used when identifying units or marking boundaries.

Long Name	Abbreviation
Air Assault	AASLT
Airborne	ABN
Armored Cavalry Regiment	ACR
Armored Division	AD
Cavalry Division	CAV
Infantry Division	ID
Light Infantry Division	ID(L)
Mechanized Battalion or TF	MECH
Mechanized Infantry Division	ID(M)
Mountain	MTN
Separate Armored Brigade	SAB
Separate Infantry Brigade	SIB
Separate Infantry Brigade (Light)	SIB(L)
Separate Infantry Brigade (Mechanized)	SIB(M)

Figure 4-6. Unit Abbreviations

SYMBOLS FOR THE GROUND ENVIRONMENT

Situation maps and overlays provide a rapid and easily understood means by which a commander or staff may express an operational plan, concept, or friendly or enemy situation. The combination of unit and weapon symbols with objectives, boundaries, routes of march, and other control measures creates an indispensable tool for quickly and accurately portraying battle activity. Standardization of techniques is essential if tactical information is to be relayed without misunderstanding.

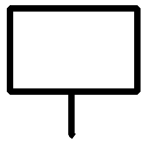
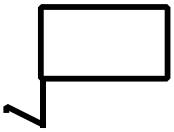
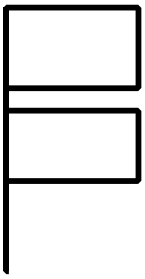
Present and Proposed Locations

Basic unit and installation symbols are drawn with either solid or broken lines. The center of mass of the symbol indicates the general vicinity of the center of mass of the unit. If a staff is added to identify a headquarters, the base of the staff indicates the precise location of the headquarters.

A solid line symbol represents a present or actual location.	
A broken line symbol indicates a future or projected location.	

Precise Locations

To indicate locations more precisely, the following methods are employed.

Basic symbols other than the headquarters symbol (for example, points) may be placed on a staff which is extended or bent. The end of the staff indicates the precise location.	
Since the headquarters symbol already includes a staff, this staff may be extended or bent. The end of the staff, or extension (if used), indicates the exact location of the headquarters.	
If several headquarters are at one location, more than one headquarters symbol can be on a single staff.	
If a group of units or installations other than a headquarters is at one location, the grouping of symbols may be enclosed with a bracket and the exact location indicated with a staff.